

1 ABSTRACT OF THE DISCLOSURE

2 A lamp house is located face to face with a substrate which is
3 transferred by a conveyer means. A dielectric barrier discharge lamp is
4 provided in the lamp house to irradiate the substrate with ultraviolet light,
5 while a moistened inert gas, consisting of an inert gas and water vapor, is
6 supplied to a space between the substrate and the dielectric barrier discharge
7 lamp from a moistened inert gas generating means. Under irradiation of
8 ultraviolet light from the dielectric barrier discharge lamp, water vapor in the
9 moistened inert gas is split into a reducing active member $[H\cdot]$ and an
10 oxidative active member $[OH\cdot]$.